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| 10/808,656                             | 03/24/2004  | Michael A. Rothman   | 42P16428X           | 6115             |
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| SHIU, HO T                             |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/808,656

**Applicant(s)**

ROTHMAN ET AL.

**Examiner**

HO SHIU

**Art Unit**

4152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date See Continuation Sheet  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06 September 2005,, 16 December 2005, 16 March 2007.

### **DETAILED ACTION**

1. Claims 1-17 are pending in this application.

#### ***Claim Objections***

2. With respect to claim 1, the claim ends with a semi-colon. Appropriate correction is required.
3. With respect to claim 3, the claim ends with a double period. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 14-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. With respect to claim 14, "machine-readable medium" is being recited. As recited in the specification, "a machine-readable medium can include propagated signals such as electrical, optical, acoustical or other form or propagated signals (e.g.,

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carrier waves, infrared signals, digital signals, etc)." Electromagnetic carrier signals is not one of the statutory subject matters. See MPEP § 2106.01

7. With respect to claims 15-17, they are dependent claims of claim 14. Therefore, they are rejected for the same reasons in claim 14 above as not one of the statutory subject matter. See MPEP § 2106.01

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2, 12, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. With respect to claims 2, 12, and 17, the phrase "in a manner that is transparent" does not define how the firmware, method, or operations is "transparent" to the operating system, resulting in making the claim indefinite.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**12. Claims 1-8, 11-15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Leigh et al. (Pub # US 2003/0088655 A1, hereinafter Leigh).**

13. With respect to claim 1, Leigh discloses sharing an input device across a plurality of computing platforms, comprising: ([0028], lines 3-5, [0029], lines 1-4, lines 8-10) routing input data generated at a first computing platform to a second computing platform, said input data generated in response to receiving an input signal produced by an input device coupled to a first computing platform ([0030], lines 5-11); and providing the input data to an operating system running on the second computing platform ([0036], lines 1-8, [0037], lines 13-15).

14. With respect to claim 2, Leigh discloses firmware in a manner that is transparent to the operating system running on the second computing platform. ([0030], lines 25-30, [0036], lines 1-8, [0037], lines 13-15).

15. With respect to claim 3, Leigh discloses the input device comprises one of a keyboard and mouse ([0037], lines 6-9).

16. With respect to claim 5, Leigh discloses facilitated by firmware stored on each of the resource host and target computing platforms ([0030], lines 5-11).

17. With respect to claim 6, Leigh discloses maintaining global resource mapping information identifying the resource host and the target computing platforms ([0028], lines 5-14, [0029], lines 1-10).

18. With respect to claim 7, Leigh discloses a local copy of the global resource mapping data on each of the plurality of computing platforms ([0028], lines 5-14, [0032], lines 6-8).

19. With respect to claim 8, Leigh discloses maintaining the global resource mapping data via a central global resource manager ([0028], lines 5-14, [0029], lines 1-10).

20. With respect to claim 4, Leigh discloses sharing keyboard, video and mouse resources across a plurality of computing platforms, comprising ([0030], lines 5-11): routing user input data produced at a resource host computing platform in response to user inputs via a keyboard and mouse coupled to the resource host computing platform to a target computing platform ([0030], lines 26-32, [0032], lines 1-6); providing the user input data to an operating system running on the target computing platform ([0032], lines 1-6, [0037], lines 13-15); routing video data produced by an operating system running on the target computing platform to the resource host computing platform

([0036], lines 8-11, [0061], lines 13-16); and processing the video data at the resource host computing platform to generate a video display signal to drive a video display coupled to the resource host computing platform ([0061], lines 13-16, [0014], lines 4-7).

21. With respect to claim 11, Leigh discloses the plurality of computing platforms comprise a plurality of server blades operating in a blade server environment ([0011], lines 13-16).

22. With respect to claim 12, Leigh discloses the method is performed in a manner that is transparent to operating systems running on the plurality of computing platforms ([0030], lines 25-30, [0036], lines 1-8, [0037], lines 13-15).

23. With respect to claim 13, Leigh discloses facilitated by firmware running on each of the plurality of computing platforms ([0030], lines 25-30).

With respect to claim 14, Leigh discloses sharing of keyboard, video and mouse resources coupled to the first computing platform by performing operations including ([0030], lines 25-30, [0033], lines 1-4): routing input data produced at the first computing platform in response to user inputs via the keyboard and mouse to a second computing platform (figure 2, [0030], lines 5-14); providing the input data to an operating system running on the second computing platform ([0037], lines 13-15); and routing video data produced by the operating system running on the second computing platform to a video



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signal generation component on the first computing platform ([0036], lines 8-11, [0061], lines 13-16).

24. With respect to claim 15, Leigh discloses instructions comprise firmware instructions ([0030], lines 5-11).

25. With respect to claim 17, Leigh discloses the operations are performed in a manner that is transparent to the operating system running on the second computing platform ([0036], lines 1-8, [0037], lines 13-15).

***Claim Rejections - 35 USC § 103***

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. **Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leigh as applied to claim 4 in view of Bigelow et al. (US Pub # 2004/0128562 A1, hereinafter Bigelow).**

28. With respect to claim 9, Leigh does not disclose the user input and video data are routed over an out-of-band communication channel.

In the same field of endeavor, Bigelow discloses where the user input and video data are routed over an out-of-band communication channel ([0036], lines 1-7, [0037], lines 10-14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Leigh with the teachings of Bigelow in order for communications to occur outside previously established communications method or channel.

29. With respect to claim10, Leigh does not disclose the OOB communication channel comprises one of a system management bus, an Ethernet-based network, or a serial communication link.

In the same field of endeavor, Bigelow discloses the OOB communication channel comprises one of a system management bus, an Ethernet-based network, or a serial communication link. ([0037], lines 10-14).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Leigh with the teachings of Bigelow in order for communications to occur outside previously established communications method or channel.

***Claim Rejections - 35 USC § 103***

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**31. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leigh as applied to claim 14 in view of DeCaprio et al. (US Patent # 7,114,180 B1, hereinafter DeCaprio).**

32. With respect to claim 10, Leigh does not disclose the article comprises a flash device.

In the same field of endeavor, DeCaprio discloses the article comprises a flash device (Column 5, lines 50-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Leigh with the teachings of DeCaprio in order to efficiently erase and reprogram memory and maintain information without the need of power.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HO SHIU whose telephone number is (571)270-3810. The examiner can normally be reached on Mon-Thur (7:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on 571-272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTS  
01/10/2008

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Supervisory Patent Examiner, Art Unit 4152